

“Design and Automation of Requirements Management Process for the System Approach for Safety Oversight”

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The general goal of this project is to design and automate a process that will oversee and coordinate requirement changes among all entities under the System Approach for Safety Oversight (SASO) umbrella. SASO is a FAA Flight Standards Organization (AFS) initiative that is trying to improve aviation safety based on the system approach principle. As such, SASO will cover several other AFS safety initiatives being developed and/or implemented by different AFS organizations. Each of these entities may (or may not) has its own requirements change management (RCM) process. A requirement change request approved by one entity may affect other entities. Due to the lack of a proper interface between these entities, the effect of a change from one entity on other entities is not properly analyzed or recorded. Thus, the overall safety performance of the whole system can be compromised. The objective of this research is to develop and propose a consistent higher-level interface to assist different AFS entities to manage and track the changes of their requirements. The research also focuses on technologies and techniques that help automate the process and minimize negative effect in requirements changes among AFS entities.

Accomplishments and Activities

The PIs have met with AFS and AAR-490 personnel for information exchange and feedback relating to the Requirement Management Process using by entities under the SASO. The PIs have developed a process to manage/track requirements and a Web-based prototype to demonstrate the process. The process emphasized on accountability, resolve requirement conflicts, process streamline, and task automation.

A draft final technical report was submitted for review in June, 2002. A no-cost extension was requested to extend the grant expiration date from July 15, 2002 to July 31, 2002, so the project sponsor (AFS-900) can be briefed at convenience time. A briefing is being scheduled at AFS-900 on July 22, 2002. The final technical report is expected in August 2002.